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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,455	03/07/2002	Toshinori Tanaka	Q68494	2481

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SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

MULLINS, BURTON S

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 03/06/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/091,455

Applicant(s)

TANAKA ET AL.

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) n/a. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The information disclosure statement (IDS) submitted on 7 March 2002 has been considered by the examiner.

### *Drawings*

3. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

4. The disclosure is objected to because of the following informalities: Non-idiomatic expressions appear throughout the specification and should be amended. For example, "completing to assemble" p.3, lines 13 and 20 and p.4, line 1; "abolish the aging process" p.13, line 1, p.14, lines 1 and 18 and p.15, line 4; and "roughened by spark" p.13, line 26;

Appropriate correction is required.



*Claim Objections*

5. Claims 3-4 are objected to because of the following informalities: Change "by" and "with" to --of---. Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

6. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 1 and 17, recitation "wherein the surface of the commutator is rubbed...in advance" is vague and indefinite because it is not clear what the rubbing step is in "advance" of.

*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Rickrode et al. (US 3,722,144). Rickrode teaches a rotary electric machine comprising: a commutator 30 (Fig.1); brushes (not shown, c.8, lines 16-20) sliding on a surface of the commutator 30; and an armature 28; wherein the surface of the commutator is rubbed by a shakedown or "abrading" brush 106 (Fig.5) other than the brushes in advance (c.1, line 43-c.2, line 4; c.3, lines 32-48).

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Regarding claim 5, the wire or preferably "Nylon" abrading brush of Rickrode (c.6, lines 38-46) is different from the carbon brushes described at c.8, lines 16-20.

Regarding claim 18, the armature 28 of Rickrode has not yet been assembled into an electric machine, and the carbon brushes described at c.8, lines 16-20 have not been "assembled in the rotary electric machine".

Regarding claim 19, the armature 28 may comprise a single, "newly manufactured" unit (c.8, lines 40-41).

Regarding claim 20, there is no electricity applied to the abrading brush 106.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3, 7, 9, 11, 13 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Rickrode. Regarding claim 3, Rickrode does not teach explicitly that the abrading brush 106 is larger in width than the motor brushes. However, it would have been obvious to one of ordinary skill to select a larger width since Rickrode teaches that the brushes are obtainable in various diameters and widths or thicknesses (c.6, lines 50-51) and since changes in size have been held to involve ordinary skill. In re Rose, 105 USPQ 237 (CCPA 1955). Regarding claim 7, the wire or preferably "Nylon" abrading brush of Rickrode (c.6, lines 38-46) is

different from the carbon brushes described at c.8, lines 16-20. Regarding claims 9, 11, 13 and 15, Rickrode does not explicitly teach that the armature is to be used on an electromotive power steering device, however a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, as Rickrode's armature is, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

#### *Allowable Subject Matter*

11. Claims 2, 4, 6, 8, 10, 12, 14 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Regarding claim 2, the wire or preferably "Nylon" abrading brush of Rickrode (c.6, lines 38-46) would not appear to produce a carbon coating on the surface of the commutator. Claims 4, 6, 8, 10, 12, 14 and 16, by virtue of their dependence from claim 2, would be allowable.


#### *Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 305-7063. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 305-1341 for regular communications and 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.

  
Burton S. Mullins  
Primary Examiner  
Art Unit 2834

bsm  
March 3, 2003